

## WHAT IS CLAIMED IS:

1. A recording apparatus for recording a received signal as digital data in a file format comprising:

5 a buffer memory for temporarily storing the received signal as digital data;  
a storage means for storing the digital data as files;  
a control means for performing a control to cause the digital data temporarily stored in said buffer memory to be stored in said storage means as files;  
and

10 a manual input means for inputting a division command for dividing the digital data at an arbitrary instant;

wherein said control means carries out the control in such a manner that the digital data continuously received and stored in said buffer memory is stored in said storage means at a writing speed which is higher than a speed at which the digital  
15 data was stored in said buffer memory, while being divided into files in response to the division command from said manual input means.

2. A recording apparatus for recording a received signal as digital data in a file format comprising:

20 a buffer memory for temporarily storing the received signal as digital data;  
a storage means for storing the digital data as files;  
a control means for performing a control to cause the digital data temporarily stored in said buffer memory to be stored in said storage means as files;  
and

25 a division managing means for generating a division timing signal for dividing the digital data at an arbitrary instant;

wherein said control means carries out the control in such a manner that the digital data continuously received and stored in said buffer memory is stored in said storage means at a writing speed which is higher than a speed at which the digital  
30 data was stored in said buffer memory, while being divided into files in response to the division timing signal from said division managing means.

3. A recording apparatus according to claim 2, wherein said division managing means generates said division timing signal at a predetermined time interval or at each of preset time instants.

5 4. A recording apparatus according to claim 2, wherein said division managing means generates said division timing signal when a predetermined change in environmental condition has occurred or when a predetermined signal is received from the outside.

10 5. A recording apparatus according to claim 2, wherein said division managing means comprises an artificial intelligence fuzzy-judgment means which generates said division timing signal based on an automatic judgment.

6. A recording apparatus according to any one of claims 2 to 5, further  
15 comprising a manual input means for inputting a division command for dividing the digital data at an arbitrary instant, wherein said control means performs the control of dividing the digital data into files in response to the division command from said manual input means or the division timing signal from said division managing means.

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7. A reproducing apparatus for reproducing digital data stored in a file format comprising:

a storage means for storing digital data as a plurality of files;

a buffer memory for temporarily storing the digital data read from said

25 storage means; and

a control means for performing a control to cause the digital data stored in said storage means in the form of a plurality of files to be temporarily stored in said buffer memory in order to allow the digital data to be outputted therefrom to the outside at a predetermined speed;

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wherein said control means carries out the control in such a manner that the digital data is read from said storage means into said buffer memory at a reading speed which is higher than a speed at which the digital data is outputted from said

buffer memory to outside to thereby allow the plurality of files of digital data stored in said storage means to be outputted to the outside as digital data in a continuous format.

5 8. A recording/reproducing apparatus for recording a received signal as digital data in a file format and for reproducing the digital data stored in the file format comprising:

a storage means for storing the digital data as a plurality of files;

10 a buffer memory for temporarily storing the received signal as digital data in a recording mode and for temporarily storing the digital data read from said storage means in a reproducing mode;

a manual input means for inputting a division command for dividing the digital data at an arbitrary instant in the recording mode; and

15 a control means for performing a first control to cause the digital data temporarily stored in said buffer memory to be stored in said storage means as files in the recording mode and for performing a second control to cause the digital data stored in said storage means in the form of a plurality of files to be temporarily stored in said buffer memory in order to allow the digital data to be outputted therefrom to the outside at a predetermined speed in the reproducing mode;

20 wherein said control means carries out the first control in the recording mode in such a manner that the digital data continuously received and stored in said buffer memory is stored in said storage means at a writing speed which is higher than a speed at which the digital data was stored in said buffer memory, while being divided into files in response to the division command from said manual input means, said control means further carrying out the second control in the  
25 reproducing mode in such a manner that the digital data is read from said storage means into said buffer memory at a reading speed which is higher than a speed at which the digital data is outputted from said buffer memory to the outside to thereby allow the plurality of files of digital data stored in said storage means to be  
30 outputted to the outside as digital data in a continuous format.

9. A recording/reproducing apparatus for recording a received signal as digital

data in a file format and for reproducing the digital data stored in the file format comprising:

a storage means for storing the digital data as a plurality of files;

5 a buffer memory for temporarily storing the received signal as digital data in a recording mode and for temporarily storing the digital data read from said storage means in a reproducing mode;

a division managing means for generating a division timing signal for dividing the digital data at an arbitrary instant; and

10 a control means for performing a first control to cause the digital data temporarily stored in said buffer memory to be stored in said storage means as files in the recording mode and for performing a second control to cause the digital data stored in said storage means in the form of a plurality of files to be temporarily stored in said buffer memory in order to allow the digital data to be outputted therefrom to the outside at a predetermined speed in the reproducing mode;

15 wherein said control means carries out the first control in the recording mode in such a manner that the digital data continuously received and stored in said buffer memory is stored in said storage means at a writing speed which is higher than a speed at which the digital data was stored in said buffer memory, while being divided into files in response to the division timing signal from said division  
20 managing means, said control means further carrying out the second control in the reproducing mode in such a manner that the digital data is read from said storage means into said buffer memory at a reading speed which is higher than a speed at which the digital data is outputted from said buffer memory to the outside to thereby allow the plurality of files of digital data stored in said storage means to be  
25 outputted to the outside as digital data in a continuous format.

10. A recording/reproducing apparatus according to claim 9, wherein said division managing means generates said division timing signal at a predetermined time interval or at each of preset time instants.

30 11. A recording/reproducing apparatus according to claim 9, wherein said division managing means generates said division timing signal when a

predetermined change in environmental condition has occurred or when a predetermined signal is received from the outside.

12. A recording/reproducing apparatus according to claim 9, wherein said  
5 division managing means comprises an artificial intelligence fuzzy-judgment means which generates said division timing signal based on an automatic judgment.
13. A recording/reproducing apparatus according to any one of claims 9 to 12,  
10 further comprising a manual input means for inputting a division command for dividing the digital data at an arbitrary instant, wherein said control means performs the control of dividing the digital data into files in response to the division command from said manual input means or the division timing signal from said division managing means.